



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/556,503	04/24/2000	Charles J. Burnett	10991754-1	7659
22878	7590	01/21/2004	EXAMINER	
AGILENT TECHNOLOGIES, INC. INTELLECTUAL PROPERTY ADMINISTRATION, LEGAL DEPT. P.O. BOX 7599 M/S DL429 LOVELAND, CO 80537-0599			TAYLOR, BARRY W	
			ART UNIT	PAPER NUMBER
			2643	17
DATE MAILED: 01/21/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/556,503

Applicant(s)

BURNETT, CHARLES J.

Examiner

Barry W Taylor

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 April 2000 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. In view of the Appeal Brief filed on 9/22/03, PROSECUTION IS HEREBY REOPENED. Rejections set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 4, 6, 11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Emerson et al (5,553,059 hereinafter Emerson).

Regarding claim 1. Emerson teaches a slave test unit (see 22 figure) 1 for testing voice signal quality over phone connections (see wire pair 16 connected to either loop back point 28 or 30 figure 1) comprising:

at least two phone line connectors attached to separate phone lines (see first wire pair 16 having phone line connectors for transmit path and second wire pair 18 having phone line connectors for receive path, col. 4 lines 50-57),

means for transmitting and receiving electrical signals via the phone line connectors (see 16 and 18 figure 1), the electrical signals being transmitted and received between the slave test unit (see slave test unit 22 figure 1) and at least one remote test unit (see remote test unit 32 figure 1), the electrical signals received from the remote test unit (see remote test 32 figure 1) comprising commands;

means for decoding the test commands from the electrical signals received from the remote test unit (see col. 3 line 66 – col. 4 line 5 wherein the slave unit (i.e. 22 figure 1) monitors information received on lines 16 for test commands, see “command detector” col. 4 line 66);

means for executing the test commands, the executing means including the ability to generate test signals (col. 4 lines 58-60, col. 4 line 66 – col. 5 line) on any of the separate phone lines, the test commands being received exclusively from the remote test unit (i.e. 32 figure 1).

Regarding claim 2. Emerson teaches the slave (22 figure 1) uses pattern generator (36 figure 1) to send electrical signals back to remote (32 figure 1).

Regarding claims 4 and 13. Emerson teaches loop back command (col. 2 lines 6-8).

Regarding claim 6. Emerson teaches the remote test unit (i.e. 32 figure 1) inherently possesses a human operator interface which allows for control signals and test data signals to be transmitted and received from slave unit (i.e. 22 figure 1).

Regarding claim 11. Method claim 11 is rejected for the same reason as apparatus claim 1 since the recited apparatus would perform the claimed method steps.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emerson et al (5,553,059 hereinafter Emerson).

Regarding claims 3 and 12. Emerson does not explicitly show the test command is a dialback command. However, Emerson uses pattern generator (36 figure 1) for use when in pattern generating mode.

Therefore, it would have been obvious for any one of ordinary skill in the art at the time of invention to modify the invention as taught by Emerson to use the pattern generator located in slave unit (i.e. 22 figure 1) to dial back the master (i.e. 32 figure 1).

Art Unit: 2643

4. Claims 5, 7-10, 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emerson et al (5,553,059 hereinafter Emerson) in view of Hardy et al (6,519,323 hereinafter Hardy).

Regarding claims 5 and 14. Emerson does not explicitly show test command is a quiet termination command.

Hardy teaches test unit for use at a network interface device wherein the test unit may be remotely activated from a remote site (abstract). Hardy discloses the testing unit may perform multiple types of tests, including tests for detecting line loss, line noise and latency (abstract). Hardy teaches the test unit may be able to generate tones, silence a line and identify latency for transmitted signals (col. 5 line 59 – col. 6 line 34).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the slave unit (i.e. 22 figure 1) as taught by Emerson to include a silence element as taught by Hardy for the benefit of silencing portion of network enabling the slave unit to take measurement of line noise or echo path delay.

Regarding claims 7 and 16-17. Emerson does not explicitly show the remote unit is another slave unit.

Hardy teaches test unit for use at a network interface device wherein the test unit may be remotely activated from a remote site (abstract). Hardy discloses the testing unit may perform multiple types of tests, including tests for detecting line loss, line noise and latency (abstract). Hardy teaches the test unit may be able to generate tones, silence a line and identify latency for transmitted signals (col. 5 line 59 – col. 6 line 34). Hardy

Art Unit: 2643

teaches using first and second test units to determine line noise or echo path delay (col. 5 lines 59-67). Hardy also shows the first and second test unit may be used to transmit signals back and forth wherein the second unit echos the signal back to first unit.

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the slave unit (i.e. 22 figure 1) as taught by Emerson to first and second test unit as taught by Hardy for the benefit of silencing portion of network enabling with one unit and take measurement of line noise or echo path delay with another unit.

Regarding claims 8, 15 and 18. Emerson does not explicitly show DTMF signals. Hardy teaches test unit for use at a network interface device wherein the test unit may be remotely activated from a remote site (abstract). Hardy discloses the testing unit may perform multiple types of tests, including tests for detecting line loss, line noise and latency (abstract). Hardy teaches the test unit may be able to generate tones, silence a line and identify latency for transmitted signals (col. 5 line 59 – col. 6 line 34). Hardy teaches using first and second test units to determine line noise or echo path delay (col. 5 lines 59-67). Hardy also shows the first and second test unit may be used to transmit signals back and forth wherein the second unit echos the signal back to first unit. Hardy further shows performing test by generating a test tone, transmitting the test tone and measuring the line loss (col. 7 lines 15-18).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the slave unit (i.e. 22 figure 1) as taught by Emerson to include test

Art Unit: 2643

tone element as taught by Hardy for the benefit of transmitting test tone and measuring line loss.

Regarding claims 9-10. Emerson does not explicitly show FXO or E&M.

Hardy teaches test unit for use at a network interface device wherein the test unit may be remotely activated from a remote site (abstract). Hardy discloses the testing unit may perform multiple types of tests, including tests for detecting line loss, line noise and latency (abstract). Hardy teaches the test unit may be able to generate tones, silence a line and identify latency for transmitted signals (col. 5 line 59 – col. 6 line 34). Hardy teaches using first and second test units to determine line noise or echo path delay (col. 5 lines 59-67). Hardy also shows the first and second test unit may be used to transmit signals back and forth wherein the second unit echos the signal back to first unit. Hardy shows performing test by generating a test tone, transmitting the test tone and measuring the line loss (col. 7 lines 15-18). Furthermore, Hardy shows long distance telephone lines (col. 1 lines 6-9) which reads on FXO. Hardy further shows earpiece and mouth piece connection (col. 3 linees 46-49).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the slave unit (i.e. 22 figure 1) as taught by Emerson to first and second test unit as taught by Hardy for the benefit of silencing portion of network enabling with one unit and take measurement of line noise or echo path delay with another unit so that long distance carriers may be able to determine the location of problem.

Response to Arguments

5. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W. Taylor whose telephone number is (703) 305-4811. The examiner can normally be reached on Monday-Friday from 6:30am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on (703) 305-4708. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 customer service Office whose telephone number is (703) 306-0377.

Patent Examiner

Barry W. Taylor

Duc Nguyen
DUC NGUYEN
PRIMARY EXAMINER

Curtis Kuntz
CURTIS KUNTZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600